## The Mushroom Journal

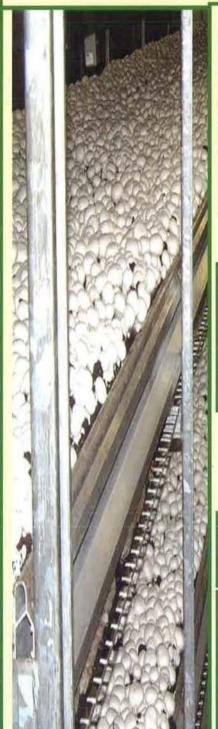
Official Journal of the Mushroom Growers' Association

DECEMBER 2003 Number 647

INSIDE: IRISH MUSHROOM INDUSTRY

PROFILE — SIMON MIDDLEBROOK

### HUMAX



### MUSHROOM CASINGS





FINEST QUALITY DEEP DUG OLD DENSE WET BLACK PEAT



OUR DENSE BLENDS HAVE BEEN USED BY MUSHROOM GROWERS FOR MORE THAN 50 YEARS. FOR EASE OF HANDLING AND EVEN MORE WATER TRY ADDED COIR





STILL THE BEST BASE
MATERIAL FOR DENSE HEAVY
QUALITY MUSHROOMS!
DUG DEEP!



For blends to suit every grower: Fully tested for human pathogens prior to release: Delivery service second to none in our industry: Competitive prices to all growers: Available in bulk bags 1M3 & 1.5M3, Bulk loose tipper & walking floor.

Sales North & Scotland: Michael Shaw: 01765676216 Midlands & South: Ian Panter: 07771-897808 HUMAX HORTICULTURE: Tollund House, 8 Abbey Street, Carlisle. CA3 8TX Tel: Humax Sales: 01228-522181 Fax: 01228-541460 Email Sales@humax.co.uk

### INSIDE

World of Mushrooms	5
Danish visit to Waveney Group	6
Letter to the Editor	9
Cotswold Views	10
Mushroom Bureau	12
Problem Page	13
The Irish Mushroom Industry	15
Anglia Farmers	18
Looking back	19
4th All-Ireland Mushroom	
<b>Conference &amp; Trade Show</b>	20
"'ushroom Journal Profiles:	
Simon Middlebrook	23
Market Place	25



Front Cover photograph courtesy of the MUSHROOM BUREAU

shroom Growers' Association

uitorial Board Geoff Ganney, Peter Flegg, Richard Gaze, David Mann and Richard Green.

Editor Richard Gaze.

Technical Editor Peter Flegg. Journal Manager Melissa Nairn.

Administration, advertising and editorial office PO Box 192, Ketton, Stamford PE9 3ZT Tel: 01780 722074.

01780 729006. Fax:

E-mail: mel@mushjournal.fsnet.co.uk Website: mushroomgrowers.org

MGA Council Vice-chairman - Adrian Sampson. Robert Brown, James Rothwell, Peter Davies, Rodney Barrett, Catherine Mitusch, John Clay, John Garlick,

Ian Maclay, Tony Dumbreck (Hon. Treasurer). Articles for consideration are welcome; also letters for publication which should make a point strongly

and as briefly as possible. They may be faxed or posted and should be addressed to the Journal Manager.

The Journal Manager, Editorial Board and the MGA do not necessarily support, nor are they responsible for statements made by contributors to the Journal. The leading article is normally a statement of MGA policy.

The acceptance of advertisements does not necessarily

mean the endorsement of any product or service concerned. Registered as a newspaper. All rights are reserved and the publisher's permission must be obtained before any part of this publication is reproduced in any form or photocopied or used in any information retrieval system. ISSN 0144-0551

## Müshroom

December 2003

No 647

### **EDITORIAL**

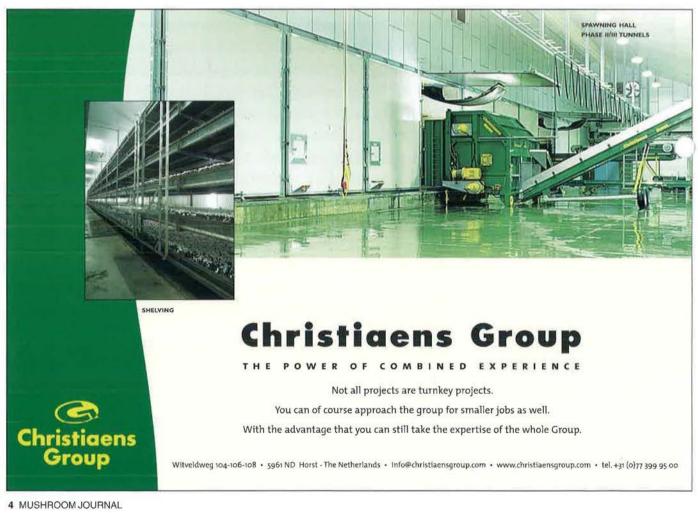
### Not the easiest of years!

At the beginning of 2003 it was stated in the Editorial of the January 2003 Journal that the prospects were that it would not be the easiest of years for many of us. This has unfortunately turned out, for some, to be a rather bitter understatement and to those businesses that have ceased trading must go our sympathy. There but for the Grace of God ... one could in some instances add 'and the short-termism of some retailers'. But griping never did anyone any good and the said retailers would no doubt argue that their market place is just as competitive as ours.

Now is the time, perhaps, to lick our wounds but more importantly to go in to the new year with some optimism. Despite the high profile nature of some recent closures there is still a substantial industry left in Britain. If that begins to sound defensive it's not meant to be. Survival is an accolade in its own right and should be treated as such. It may not be something, however, to become too complacent about, we most certainly need to develop to ensure that it continues to be the case. Some might say the way forward is more specialisation, predominantly marketing companies, largely supplied by specialist growers, in turn supplied by specialist composters. Looking round the industry convinces one of only one thing, that survival will take many and diverse forms depending on size, location and inclination. But whatever form it takes it will encompass expertise in marketing and growing, disease control and costlimitation. There isn't much room for 'quite good' anymore.

There is good news, if you know where to look for it. Productivity is rising, costs are falling, diseases are being combated and even cases of modest expansion are being reported. The British industry moves on and will continue to supply a large part of the home market. Which only leaves us to wish you all a Happy and Prosperous New Year.







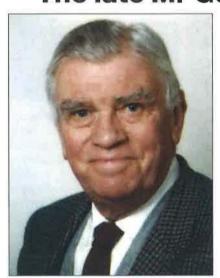
### Sponsors of WORLD OF MUSHROOMS

### **NEW PART-TIME MGA CHAIRMAN**

The Mushroom Growers' Association is delighted to announce the appointment of Mr Peter Woad as the new part-time paid MGA Chairman at the beginning of January 2004.

Further details, together with contact details for Peter, will appear next month.

### The late Mr Gerard Derks



It is with regret that we inform our readers of the death this year of Mr Gerard Derks.

Gerard was well-known and respected by many MGA members all over the world through his International Consultancy business based in Italy. He had been very much involved in the industry since 1958 and was a regular contributor to the Mushroom Journal along with many other sister publications. He was a keen supporter at MGA and other Mushroom Industry events all over the world.

Gerard, who passed away in February 2003, was 80 years of age and will be well-remembered and sorely missed by all his friends, family and the "Mushroom World" for which he lived. We send our condolences to Paola, his wife, his sons and the family.

## 737 A15 130 81 Brown 856 Brown

### MR JOHN PEAKER

It is with regret that we announce the death of Mr John Peaker. Mr Peaker passed away in December 2003. An obituary will appear next month.





Sylvan Ireland, Beechmount, Navan, Co. Meath. Telephone: (046) 22358 Fax: (046) 22279 Email: sylvanireland@sylvaninc.com

### A DANISH VISIT TO THE WAVENEY GROUP

### A Danish Visit to the Waveney Group

### Reported by Richard Green of Sylvan

Danish production is around 8,000 tonnes of mushrooms per year of which 3,000 tonnes is processed and the remainder is for the fresh market. There are less than 10 growers supplying the fresh market, they are spread out geographically across the islands of Denmark although the major market is Copenhagen where 25% of the country's population live.

Almost all the growers make their own compost. Some phase III compost is bought in by the smaller growers both from Denmark and Holland.

#### **Woodview Mushrooms**







Composting is dominated by the conventional system so the visit to Graham Mann's farm at Wicklewood sparked a great deal of interest as his relatively small scale bunker system was a very relevant pointer to the way forward in an industry where a large scale custom composter is unlikely to emerge. Despite being just across the North Sea the winter climate in Denmark is far more severe than the UK and all compost is made in enclosed yards.





### A DANISH VISIT TO THE WAVENEY GROUP — (continued...)





### **Flixton Mushrooms**

Phase II is, as would be expected, all in bulk, however, David Mann's bulk tunnels were a new experience, all the tunnels in Denmark being of Dutch design either panels or gas concrete. David had opted some 3 years ago for plastic tunnels with separate retaining walls, enabling unloading with a Bobcat without the risk of terminal structural damage, again cheaper on the smaller scale than nets and winches. Lots of photos

expect some clones to appear in Denmark. The Danes largely use phase III compost with a fill weight of 95 to 100 kg m² so were somewhat taken aback at the fill weight, particularly as Flixton which would be 115 kg at spawning.









### **TAS Valley Mushroom Farm**

As we moved onto cropping, Tas Valley with its 70% large opens was an eye opener. There is just beginning to be a market for the open mushroom in Denmark, globalisation means they are calling it the Portobello.



### A DANISH VISIT TO THE WAVENEY GROUP — (continued...)

David Spurdens' pinning, thinning and watering techniques all caused much head scratching. Cropping techniques between the two countries could not be more different. Health and Safety regulations which come into force in Denmark in 2005 mean that the width of the shelf cannot be more than 1.20 wide, the gap between shelves must be a minimum of 50 cm and the pickers cannot pick for more than 50% of the time they are employed to prevent RSI. The rest of the time they can pack or act as porters or clean, all for a wage of £12 per hour. The sound of the Waveney growers jaws hitting the floor was audible beyond the boundaries of Norfolk and Suffolk. To offset this seemingly impossible handicap, 80% of the mushrooms are picked and sold with the roots on, mostly in 500 gram and 1 kg pre-packs, giving around a 15% vield increase over a cut mushroom.











### **Producer Organisation**

The Danes are well aware of the burgeoning production of mushrooms in central Europe and are only 3 hours away from Poland. They estimate imports are at around 20% of the total market and 25% cheaper. Their strategy for preventing the situation from deteriorating is one not available to the UK growers. That is to emphasise the national brand of Danish mushrooms. Each pack produced in Denmark has the Danish flag displayed and the Danish consumer is very loyal to home-produced product. This not only applies to mushrooms but to all of horticulture. Denmark is unique in having a thriving horticultural industry despite being so close to Holland. The trip ended with a sketch of how to set up a producer organisation from Jon Fuller and David Mann which would seem to suit the structure of mushroom growing in Denmark and also add another aspect for their future strategy. Subsidy was not a popular option in Denmark in the past, they see no point in standing in a line combing each others hair. However needs must when the Devil drives, a brief discussion that followed brought complete agreement. Danes and Brits in the mushroom sector are Euro-sceptics to a man.

### **LETTER TO THE EDITOR**

Winterpick Business Park Limited Hurstpierpoint Road Near Henfield West Sussex BN5 9BJ

28 November 2003

To whom it may concern,

I was asked on a number of occasions at Harrogate about "change of use" and in the hope of answering some of the questions I itemise below the relevant points as I understand them.

The process requires patience, diplomacy and expense. If you think the planning authority is going to come to you and suggest building lots of luxury houses because your business is struggling, think again!

 Read your past and current planning permissions in detail and thoroughly understand them. They are legal documents.

- If they show "knock down" clauses and reinstatement to green field, should current use cease, they will use it
- 3. They now have draconian enforcement powers for breaches of planning regulations.
- 4. Plastic buildings generally have little hope value.
- 5. Employ a local planning consultant and take advice.
- 6. Chip away with small applications that are more difficult to refuse.
- Enhance communication with your local parish council who can influence to a degree the planning officers' recommendations.
- If the land is owned by the business, study the shut down costs (redundancy etc.) which will give you a clearer idea of the timing for necessary decisions as depending on the scale, 2 - 5 years may lapse before ambitions are realised.
- 9. If you get change of use, you don't have to implement it, just renew when necessary.

Yours faithfully, Michael Barton

### **TASK FORCE**

## Treacy announces establishment of mushroom industry task force

Mr Noel Treacy TD, Minister of State at the Department of Agriculture and Food recently announced the establishment of a Task Force which he has set up to examine the critical issues facing the Mushroom Sector and to draw up a co-ordinated action plan to ensure that it is rut on a firm footing. The members of the group are awn from areas involved in the mushroom supply chain, including the State Agencies which contribute to the development of this high value sector. The membership of the Task Force is listed below.

Minister Treacy said that he was pleased that the former Chief Executive of Dairygold Co-op, Mr Denis Lucey, has agreed to chair the Task Force as he will bring to bear his considerable knowledge and experience of the Agri-food industry. The terms of reference of the Task Force are 'to arrive at a consensus on the major issues facing the mushroom sector and to devise a time-bound action plan to address those issues in order to secure the future viability of the sector'.

Minister Treacy said that the mushroom sector had an outstanding record and was one of the shining examples of a totally integrated and market-led food sector. Over 20 years, farm output had grown to some 140 million, while exports to the UK market were worth in excess of 100 million last year. There are over 4,500 people employed across the sector.

Minister Treacy said that in order for the mushroom sector to continue with its past momentum it is necessary to address the many challenges which it was now facing. "Issues relating to productivity, marketing, labour, investment, environment, and our competitive position with other EU producers in a very exposed market climate will therefore be to the forefront in the work of the Task Force", concluded the Minister.

The first meeting of the Task Force was held at the end of November and Minister Treacy has set a deadline for early next year for the Report and Action Plan, to be delivered to him.

Members of the Mushroom Industry Task Force are Denis Lucy, Chairman; Michael Slattery, Irish Farmers' Association; Jim Gallogley, Commercial Mushroom Producers; Noel Heavey, Mushroom Producer (?); Liam Staunton, Teagasc; John Stanley, Monaghan Mushrooms; Padraig O'Leary, Walsh Mushrooms; Michael Neary, An Bord Glas; Mel O'Rourke, Sylvan Ireland; Vincent O'Sullivan, Food Consultant; Joe Fox, Enterprise Ireland; Representative of Retail Industry; Tara McCarthy, An Bord Bia; Jarlath Coleman, Department of Agriculture and Food and Michael Hickey, Department of Agriculture and Food. Secretariat: Ms Patricia Cannon and Dr Clodagh Byrne, Department of Agriculture and Food.

(Source: The Mushroom People, Page 11 Nov 2003 edition)

## Cotswold Views



## December 2003 by Sean Smith of Haymes Farm Produce Ltd.

The conference was well attended, by that I mean it wasn't a washout, as some may have expected. There also seemed to be an air of hope, or possibly determination, emanating from those who attended.

The new-ish format of "Farm Walks" first, then conference second, seemed to work well. I know that due to the "walks" being held during the week and not, as was the case on Saturdays, certain people do miss out but you can't please all of the people all of the time, unfortunately. I know I've tried, so now I just please myself!

Trevor Fothergill's was the first farm we visited. It was what I would describe as a frontier farm. Most of its machinery, if not all, has been built to specifically suit their needs — their ingenuity is impressive. (I assume most of it stems from a tight budget?)

The second farm we visited was Greyfriars (UK) Ltd. The growing is but a small part of their establishment, truth be told, the core business is in packing and distribution, however, it was still a tidy and well run modern unit.

Many thanks to both, for their hospitality and openness.

### H.S.E. — Hunt, Subjugate and Execute

Had a telephone call from the H.S.E., a Mr. Jervis, who I had met before two years ago, was coming for a visit. The first time he came it was for a routine visit, however, within a week or two we had a reportable accident, which brought him straight back to us to investigate it.

From his investigation, and from a review of our working practices/risk assessments, it was obvious that we had to install better guarding along the line and on other pieces of equipment, which we did.

Two years is a relatively long time for habits, bad ones, to creep back in. We still had the guards covering the line but on some of the portable equipment the guards had, over time, either been broken, removed or lost. Time to replace, renew or hide — post-haste.

Most of the documentation was up to date, Risk Assessments, Working Procedures etc. The only work that I had left to do was to review the work I had already done of the previous years. Nine times out of ten it was just a case of showing that I had, in fact, reviewed these documents.

To prove that I had done this I had to type, "Reviewed", and if it needed it, "Amended 2003", on the bottom of each page, then throw out all the old ones. (I hate wasting paper this way).

The day of the visit went well. It started with them, (there were two), asking about their previous visit and the recommendations that came from it. These recommendations are just that, they recommend solutions to areas that need improvement, how you implement or translate these is your responsibility.

Obviously, if money is no object you would do everything suggested, however, in a practical world you do what is "as far as reasonably practical" and possible, financially as well as physically. They were impressed, well may not impressed, but quite pleased is probably right, at the progress regarding health and safety issues made at Haymes since their last visit.

The other reason, yes, it turned out that it wasn't just a routine visit for them after all, it was because of an accident that had happened last year.

I knew they would ask about it, the reason I knew was because some people, when they think they are being clever, can't help but tell others how clever they are, he thought he was clever, he told others, others told me. Pre-warned is pre-armed.

So, I had prepared all the information they would want to see beforehand. It turned out that they were under the impression that the accident in question had only just happened, however, after I had put them in the picture and had explained the events surrounding the incident and what we had done since to prevent another, they were quite satisfied with my findings and they didn't take it any further. "Back of the net".

### COTSWOLD VIEWS — (continued...)

The Christmas programme this year is/was a relatively easy affair to sort out compared to last year's. There will be some work required over the weekends leading up to and during the Christmas period for the production department, however, it's not so bad.

### Best made plans and all that ...

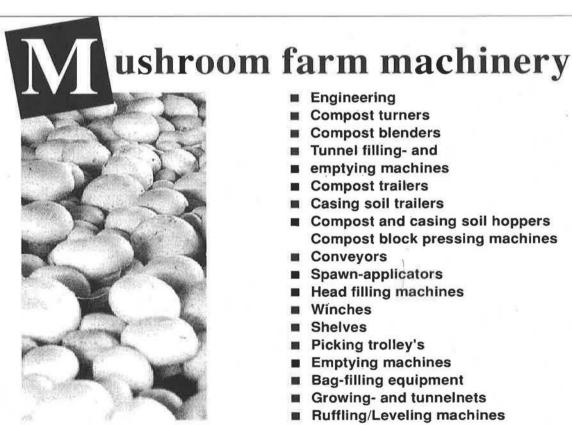
Sunday afternoon check round and all is not OK. All the power in the tunnel control room is off. Both the fans and the temperature monitors are dead. I had received a fan alarm, (the alarm system doesn't distinguish between a temperature surge or a tunnel fan failure). At around 1 o'clock, I had put it down to a Spawn run I was pumping steam into to heat it up, so a couple of hours won't hurt, it would be OK. I'd be down there at 4 o'clock to sort it out, or so I thought.

By 1030 I was still there; I had been joined by Colin, (our ectrician), and Peter. The power failure was caused by Tunnel 1's fan, we found this out when we reset the trip and went to turn it on - loud bang + sparks, "hmmm, it could be that what's causing the problem, you think?"

We managed to remove the faulty motor with a bit of sweat, a few grunts and a little back strain, (claim), and put in its place a spare, after a bit of re-drilling, cajoling and swearing. Turn on, fingers crossed, yes it started, going backwards, rewire. Turn on, it started, then ... stopped. This went on for about an hour, each combination and crossover of wires was tried. Unfortunately, in the end the spare just wouldn't \*\*\*\* work!

We had it going by 9.00 a.m. Monday, there was a bit of a surge in temperature. As in Mount Everest, it's a bit of a hill and it's a bit cold at the North Pole. It could've been worse, it could've happened Christmas week.

"Positive thoughts help you triumph over the negative situation" Haymes Farm Mantra.



- Engineering
- Compost turners
- Compost blenders
- Tunnel filling- and
- emptying machines
- Compost trailers
- Casing soil trailers
- Compost and casing soil hoppers Compost block pressing machines
- Conveyors
- Spawn-applicators
- Head filling machines
- Winches
- Shelves
- Picking trolley's
- Emptying machines
- Bag-filling equipment
- Growing- and tunnelnets
- Ruffling/Leveling machines

### Thilot Holland B.V. Engineering Works

Hoofdstraat 11-17, 5973 ND Lottum/Holland Phone +31 77 4631774 Fax +31 77 4632648



The Mushroom Bureau Committee wish to thank the following people for their contributions for 2003. Funding for this year totals: £35,091.00. The Bureau is funded voluntarily to pay for mushroom publicity in Britain. Publicity obtained this year is worth: £1 million+

To join the Bureau, please contact Victoria Lloyd-Davies on 020 7261 1086, the Directors, or any member of the committee

GROWERS	£	Haymes Farm Produce Ltd	1,28	0
Southern Mushroom Company	6,080	Elite Mushrooms Ltd	78	
Fiddleford Mushrooms Ltd		Livesey Bros Exotic Mushrooms Tecfoods Ltd	58 43	
Pond Chase Nurseries Snowcap Mushrooms		Greenmyre Mushroom Farm Ltd	38	
Shackleford Mushrooms Ltd		Cotswold Mushroom Farm	37	
Walsh Mushrooms Ltd	5,580	Southdown Mushrooms Ltd	35	0
Greyfriars (UK) Ltd	3,280	Chislet Mushrooms	33	0
J Rothwell & Son Ltd	3,080	E 78 E E E E		
Waveney Mushrooms Ltd	2,800	Contributions of £280 or less		
Coldham Wood Mushrooms		Capel Organic Mushrooms		
Elf Mushrooms		Dorset Down Mushroom Farm Downland Mushrooms Ltd		
Flixton Mushroom Ltd Orchard Mushrooms		Kentdown Mushrooms		
Tas Valley Mushrooms		M.A. Forshaw Ltd		
Thwaite Green Mushrooms		Melkirt Ltd		
Woodview Mushrooms Ltd		Oakley Mushrooms		
Leckford Mushrooms Ltd	1,580	Park Lodge Farm		
Mourne Mushrooms Marketing Ltd	1,580	The Greenery		
ALLIED TRADES				
Orchidwood Mushrooms Ltd	1,080	Amycel (UK) Ltd	350	n
Tunnel Tech North Ltd	1,080	Agricultural Supply Co (Fairford) Ltd		-
Greenhill Salads Ltd	660	Sylan Spawn Ltd	330	0
Golden Crumb Produce Ltd	580	Contributions of £280 or less		
		R B Developments & Services		
MEMBERSHIP ONLY	MS 12 124	2.3		
Barkston Heath Mushrooms	Hensby Compo	sts Ltd IP	P "Le Lion" Ltd	
Directors				
Adrian Sampson, Chairman	Southdown Mus	shrooms	01243 576777	
John Smith, Director	Greyfriars (UK)	Ltd	01765 640395	
Committee				
Rodney Barrett	R.B. Developme		0797 1231597	
Mike Ewin	Leckford Mushr		01264 810181	
Jon Fuller Elliott Gough	Waveney Group Southern Mush		01986 782571 01483 813555	
Lillott Gougii	Southern Mushi	our company	01400010000	

## The Problem Page

### TRIALS AND TRIBULATIONS



# Great, or not so great, expectations By Richard Gaze

#### Introduction

Mushroom businesses; we now shudder slightly if we hear the term mushroom growing or production; are a little like those old fruit machines that one used to see in pubs. They probably still exist in some environment or other but I lead a sheltered life. For the few who may not know what I'm talking about the 'one armed bandits', as they were also called, stood in a corner, lights blinking enticingly. Having put your money in the slot you then pulled down the long chrome-plated arm which made the 5 discs spin. If you ended up with all of them stopping and displaying the same fruit, money spilled out at your feet. There were probably different grades of success, strawberries and bananas perhaps weren't as good as ranges, but don't let's get too complicated. If you got verything right you were in the money, if not you lost what you'd put in.

You can, of course, see what I'm getting at. In the past you could, when growing mushrooms, get some sort of a jackpot with maybe three or four out of five being right. As time passed the number needed relentlessly increased to the point where some would now pessimistically argue that five oranges no longer guarantees any return at all. There has been much discussion recently on that subject and the evidence must be still that if you get everything right there is a jackpot, albeit perhaps a leaner one than in the past.

But let's dispense with oblique analogies and return to the reality of mushroom businesses. The analogies with my row of oranges are simple enough, conceptually at least. Recently published articles by Ray Samp refer to them as do others that have appeared in the Journal. Baldly and simplistically stated they are cost, marketing, quality, consistency and yield. Several of these are interelated and one could debate whether yield is in fact a separate item or an integral part of the cost structure. On the grounds of its major impact on cost I have chosen

to treat it separately. It also gives me a total of five factors to match my analogy but that is only a detail.

Another major factor in any cost structure are of course disease and pest problems either directly or indirectly, once again via the factor of yield. Columns such as this tend to major on pest and disease control. Not only, it must be said, because they can have great impact on the cost structure of any business but also because they present a clear target for attention.

One could almost say an easy target. They are relatively obvious, some unfortunately are more obvious than others. Their effects are clear cut and in many instances there are routes to follow, in theory at least, for their removal. Where no routes exist research can be employed to chart what they might be.

My intention is not, however, to belittle the importance of diseases or pests but to contrast this area of yield loss or cost accumulation with another equally or perhaps even more important factor namely production levels or mushroom yield.

### **Expectations**

Yield by contrast to pest and disease is an accumulation of highly complex inter-related issues. Compared with pest and disease control it presents a very indistinct and rather nebulous target and is therefore rarely challenged in the same structured manner. It is also highly emotive in that it reflects on one's own performance, encourages blame directed at others or even, in some instances, a state of denial within the business.

One might ask why revisit this subject again if it is so nebulous? No-one in their right mind could be expected to provide a recipe to turn 500 lb/tonne into 700 lb/tonne and I have no intention of giving the game away by so doing. So what's the point?

### THE PROBLEM PAGE — (continued...)

The point, and this is the justification for revisiting the subject, is that if one isn't consistently achieving a yield level approaching 700 lb/tonne, more on that a little later, one stands little chance of winning the jackpot. That is, not mincing words, surviving.

Justification for consistently turning out seriously moderate levels of production is a bit like explaining, while standing in a sinking boat, that one wouldn't be sinking if someone hadn't stuck a marlin-spike through the bottom. Or in other words it is a self-inflicted wound, possibly a fatal one and one that no quantity of explanation will cure.

There is, I think, before any consideration is given to the complex factors that contribute to high yields, good cause to examine one's own expectations. It is in my opinion only too easy to set these expectations too low and by so doing in effect to cheat yourself of yield that has such dramatic impact on cost.

### Comparative yields

I have thrown rounded figures about and once again have conveniently ignored the differences between phase II and phase III compost yields. Much of the difference between the two is the weight loss from one to the other. A tonne of phase III is equivalent to more than a tonne of phase II. An obvious point but one sometimes overlooked.

I'll try to wend my way through the arithmetic, it's relatively simple but that's no guarantee of success.

When you buy 100 tonnes of phase III (the figures are entirely for arithmetical simplicity) you are in fact buying about 118 tonnes of phase II, the loss in phase III being approximately 15%.

The equivalent of 500 lb/ton of phase II means your 100 tonnes of phase III should, if exactly equivalent yields are used, produce you not  $100 \times 500 = 50,000$  lb but  $118 \times 500 = 590,000$  lb, but as you accomplished that with only 100 tonnes (ph. III) the yield will be 590 lb/tonne of phase III. Other equivalents are as follows:-

Phase II	Phase III		
500	590		
550	649		
600	708		
650	767		
700	826		

I've taken a relatively high figure for loss during phase III. Some might say its only 10% but even if that is so the alleged improvements in phase III yields over and above phase II would compensate for my over-estimate. We don't of course know what ultimate possible yields are but with current experience the levels boxed, ie. 650 and 767 lb/tonne of phase II and III, respectively, would seem reasonable.

You might think these figures are exaggerated? But they are achieved and are therefore achievable and, therefore again, worth aiming for. This is in effect all that I set out to say. To suggest that under-achievement was possible, simply by setting the level of one's expectations too low.

Of course there may be some fairly obvious causes for yields substantially below those suggested. Harvesting a high proportion of buttons springs to mind. But maybe not. Maybe one is simply avoiding the issue with thoughts about the age of the air conditioning or the variability in one's raw or processed materials.

In some ways this subject is like an act of faith. If you are convinced that 650 lb/tonne (767 lb/tonne ph. III) is possible you will look for causes. If you aren't convinced, you won't.

I'd suggest one further thought for the convinced or semi-convinced, the only justifiable cause for yields less than the expectation is market grade, ie. buttons. All the other causes that might be raised are challengeable.

Having said this was the main theme of this month's sermon it is difficult to resist the temptation to go a little way along the path of causes and for one of them that temptation is irresistible.

### **Compost effects**

There was a period not so long ago when many smaller growers using bought in phase II were asking for guarantees of yield as if the yield was programmed into the compost. This may be a perception still not quite dead in many corners of the industry. The reality is well documented that the same compost can produce the highest and the lowest yields in the spectrum. It all depends on what the grower does with it.

Having said all that, compost can undoubtedly contribute to both high and of course low yields. Somewhat surprisingly this is more of a danger on home-produced yards than from custom or merchant composters for the simple reason that in most cases home produced compost has nothing to directly compare itself with. The checks and balances for compost from commercial yards supplying a number of users are considerable. Which isn't to say that commercial compost is always brilliant but there is the inherent advantage of being able to quickly see that it's gone off the boil.

It is not difficult for commercial composters to assess the potential of their compost and if necessary to convince customers of the levels by cross-referencing them.

There is serious possibility on a farm producing its own compost that the contribution to yield made by compost will be hidden amidst all the other contributing factors. Only serious compost problems with characteristic symptoms will point a finger clearly at the compost itself. There is almost a need for something akin to the old Yaxley Test Unit which would enable farms with no other form of comparison to isolate compost potential from other yield affecting causes.

What of all the other contributors to yield? I don't know where one beings with such a complex, compounding mixture but to have realistic expectations of yield, some certainty that compost is not a limiting factor and that everything in between is 'do-able' must be a constructive beginning.

Something to think about, anyway.

# The Irish Mushroom Industry

### Michael Neary — Bord Glas

.ne success of the Irish Mushroom Industry has been well documented over the last two decades. A low cost production system, satellite growing, centralised compost production and marketing and a well presented good quality product targeted at a growing market were a number of the reasons highlighted that contributed to this success. Mushroom output grew throughout the eighties and nineties until it represented one third of total horticultural output. There was Mushroom production in virtually every county as grower numbers approached 600. Exports to the UK market grew on an annual basis to such an extent that by the end of the 90's almost 30% of the total demand for mushrooms in the UK was supplied by producers from the South of Ireland.

However, over the last two years the picture has been changing. The environment in which the Irish Mushroom Industry is now operating in has become much more "ifficult. The Industry is coming under pressure from a number of sources. Costs of production have increased including labour, packaging and insurance etc. The weakening of sterling against the euro has eroded margins. The market has become much more competitive. Overall market growth has levelled off in recent years. Other suppliers such as the Dutch and Poles have come into the market place and they are gaining market share. In addition, the ongoing aggressive competition between UK retailers for market share is leading to a downward pressure on prices. All these factors are contributing to a change in the shape and structure of the Mushroom Industry. The Mushroom Industry is facing its greatest challenge since the introduction of the satellite growing system in the early 1980's. How the industry responds to these challenges will dictate how it will evolve and develop in the future.

Mushroom production was 67,594 tons in 2002 and valued at €138m. This output was similar to 2001 and highlights a consolidation in Mushroom output. This contrasts with the period 1990 to 2000 when there was

almost a doubling of production. In 2002 a total of 290,000 tons of compost was used by the Irish industry which was similar to the 2001 figure. Seventy per cent of the compost used in 2002 was phase 2 and the balance was phase 3. In 2002 there was 365 growers managing 400 production units. This is a 20% reduction in the number of units since the year 2000. When looking at the developments in Irish mushroom production one cannot look at Southern Ireland in isolation but must also look at developments in the North of Ireland. The trends are similar to those in the South with a reduction in producer numbers. It was estimated that in 2002 grower numbers were around 230 (a 20% reduction since 1999) with a mushroom output of approx. 21,000 tons. In 2002 Mushroom production on the Island of Ireland was estimated at approx 88,000 tons, which was a slight decrease on 2001. In terms of production on the island the overall trend is one of consolidation with increased production coming from fewer farms.

As well as changes in grower numbers, changes have been occurring on individual growing units in response to the more difficult operating conditions. These changes are being driven at production level by the need to improve efficiencies and reduce unit costs in order to improve margins. The Irish Mushroom Growers Association survey of Mushroom producers carried out in 2002 highlighted some of these changes. Eighty five percent of growing units have five growing tunnels or greater, with 42% having six or greater. Enterprise annual turnover is a further indication of the increasing scale of production unit where the survey identified that almost 43 per cent of enterprises had a turnover of €150,000 - €300,000 annually. In addition recent years have seen a modification in the growing methods used. While the 2002 survey identified that the sole use of bags on the floor was still the predominant method on 47% of farms, a combination of this system with other systems (e.g. blocks over bags) or the use of different systems altogether was a growing feature e.g. 27% of farms had

### THE IRISH MUSHROOM INDUSTRY IN 2003 — (continued...)

blocks on staging and 8% were using Dutch Shelving. These trends are likely to continue.

The Irish Mushroom Industry has traditionally targeted the UK market as its main market outlet and this is still the case. In 2002 over 52,000 tons of mushrooms were exported to the UK market. Taking into account exports from the North of Ireland to the UK market, all Ireland exports to the UK were estimated at approx 69,000 tons last year. The UK market is currently extremely competitive. The key supplies come from the domestic British Producers and Irish and Dutch imports. Increasing supplies are also coming from Poland (albeit from a small base). It is estimated that the UK market consumes approx 170,000 tons of mushrooms per annum and that 40% of this requirement is supplied from Ireland (North & South). In addition over one third of domestic UK production is controlled by Irish owned companies.

The most striking feature of the UK mushroom market in recent years is the increased focus given to it by the Dutch marketeers. In 2002 Dutch mushroom output amounted to 270,000 tons which was similar to production in 2001. Forty per cent of this production is for the fresh market (with the balance going to the processing sector) of which three quarters of these go to exports. The UK market overtook Germany as the main outlet for Dutch exports in the year 2000. It is estimated that in 2002, 89,000 tons of fresh mushrooms were exported from Holland to the EU market (excluding third countries) with the UK market taking the largest share (i.e. 44% or 38,000 tons). In contrast fresh exports to Germany from Holland were 23,000 tons in 2002 which was a 20% drop on the 2001 figure. It is thought that increasing volumes of mushrooms from Poland arriving on the German market has contributed to the drop in Dutch exports to Germany and the increased attention which the Dutch are now giving to the UK market.

Poland is increasing in importance as a player in the EU Mushroom market and is seen as a growing influence (but from a smaller base) in the UK market. Mushroom production in Poland has increased during the 90's from 70,000 tons to well over 100,000 tons of production. The largest share of Polish exports go to the German market and for the first time in 2002 Germany took more Polish than Dutch product. In 2001 Poland supplied twice the volume of mushrooms to Germany it had supplied in 2000.

In terms of the UK market the retail market continues to be the most important outlet for Irish Mushrooms. This sector consumes 103,000 tons of Mushrooms per annum of which a significant volume is supplied from Ireland. Over 80% of all the retail sales occurs in the key supermarket outlets. Sixty per cent of the mushroom sales in the supermarket outlets occur in four chains (i.e. Tesco, Sainsbury, Asda and Safeway). In recent years the main trends in the retail sector have been a levelling

off in the overall growth of the market, consolidation of the majority of the sales in a small number of key multiples, a demand for prepacked at the expense of loose product (65% to 35%) and a stagnation of retail market prices with the result that the market value has declined in real terms. The competition between multiples is ongoing and adding to the downward pressure on prices. The recent introduction of the iauctioningi for business by a number of multiples has further accentuated this situation. The Irish home market for mushrooms is also an important outlet for 25% of domestic production. As in the export market the retail sector is the most important outlet for mushrooms and is valued at €27m annually.

As previously highlighted the Mushroom Industry now finds itself in an extremely competitive environment, particularly in relation to the Dutch and Polish producers. It is estimated that Dutch and Polish compost producers may have a cost advantage over Irish Compost manfacturers of 25-30%. In the growing sector it is considered that Dutch growers have growing costs 10-15% lower than their Irish counterpart while in Poland this maybe as high as 40-45%. Logistical costs associated with delivery (and preparation) of mushrooms from Ireland to the final customer are a key cost element and can amount to approx 30-35 cents per pound of product. In relation to this area the Dutch Industry have the advantage of scale and the capacity to ship directly to the final customer without consolidation in the UK. Another issue which needs to be addressed by the mushroom industry is the Environmental Protection Agency (EPA) requirements for compost producers which will put additional costs onto this sector of the Industry.

These issues highlight the need for the maximisation of efficiencies in all links of the production and supply chain. There are clearly a number of challenges facing the Mushroom Industry at the present time. Composte will need to consistently supply good quality compost to the growers. Growers have been and will need to continue to maximise efficiencies at production level through increasing quality, yields and throughput of compost.

Marketeers will need to ensure that logistical costs are kept to a minimum and to adopt long-term marketing strategies that will help sustain the Industry. Retailers need to maintain and manage growth in the market penetration of mushrooms in co-operation with the industry as a whole. This should encompass the marketing of mushrooms within the marketplace in terms of product development and range as well as the generic promotion of mushrooms.

It may also be timely for the key stakeholders in the Irish Mushroom Industry to examine and identify how they can co-operate and work more closely together in the production and supply chain to help in improving competitiveness and sustainability into the future.

## TEAGASC ADVISORY SERVICE CENSUS OF MUSHROOM PRODUCTION

1st January to 31st December 2002

County	No. of Farms in production	No. Dutch Farms	No. of Growers	AND STREET		Estimated Tonnage Used	
						P. 2	P. 3
CAVAN	57	3	53	105	225	36278	3000
CARLOW	5	1	5	15	12	1517	2418
CLARE	4		4	9	45	5272	(+)
CORK	3		3	32		2210	(4)
DONEGAL	27	2	23		165	18596	~
DUBLIN	3	1	3	-	26	~	2764
GALWAY	12	1	12	32	35	6084	-
KERRY	1	1	1	-	6	546	-
KILDARE	17	2	15	10	96	2994	14140
KILKENNY	1		_ 1	-		1300	-
LAOIS	1		1	5		611	-
LEITRIM	4		4	7	14	2074	-
LIMERICK	2		2		10	2054	
LONGFORD	16		12	48	49	7191	4582
LOUTH	8		8	31	16	4729	2
MAYO	29	5	24	40	183	19425	5540
MEATH	10	2	9	48	33	1183	9270
MONAGHAN	102	5	98	450	115	45422	11200
OFFALY	5		5	11	23	819	3334
ROSCOMMON	28	1	22	87	91	17032	800
SLIGO	4		3	23		2700	12
TIPPERARY	32	1	29	3	137	20761	7027
WATERFORD	1		1	-10	300	-	
WESTMEATH	10	2	10	24	42	2562	6948
WEXFORD	15		14	78	25	5431	5836
WICKLOW	3	1	3	5	19	2	5286
TOTAL	400	28	365	1063	1377	207,091	82,145

### Buying Group's gas oil supply helps hardpushed Waveney mushroom grower



These days UK mushroom growers' existence relies almost entirely on the value of the pound. Facing considerable competition from imports, it's become a very tough business, It is labour intensive and with a minimum agricultural wage of £5.15 labour accounts for 50 per cent of costs.

So anything that helps to ease the pressure on evertightening margins is welcome. Gas oil, which is used for heating and to create steam for sterilising the mushroom tunnels, is another major outlay. David Mann of Flixton Mushrooms near Bungay in Suffolk spends £20,000 a year on it but by ordering through agricultural buying group Anglia Farmers he saves around ten per cent.

It's all about economies of scale. In 1990 David Mann and five other nearby mushroom growers formed Waveney Mushrooms Limited as a marketing and distribution co-operative. In the first week they collectively sold 9,000 kgs of mushrooms. By 2000 they were selling 68,000 kgs a week and now it has gone down to 59,000 kgs a week.

"The UK mushroom output was 80,000 tonnes a year and now it's down to 40,000 tonnes a year," says David Mann. "The supermarkets used to be interested in quality but now their main criteria is price. So the price has gone down and our workforce wages have gone up. It's difficult to compete with imports from countries where labour is cheaper."

But he and his fellow members of Waveney Mushrooms are determined to go on. "Apart from my own business, Flixton Mushrooms, other members include Orchard Mushrooms, ELF, Tas Valley, Woodview and Thwaite Green. We will not compromise quality to reduce costs so we ensure that we supply a wide range of varieties and keep volumes up," explains David Mann.

Flixton Mushrooms is embarking on an expansion programme to increase its own output of 18,000 kgs a week. While most of the supermarkets have given their business to European mushroom growers, there is a glimmer of hope for Waveney Mushrooms. Aldi supermarket is a major customer and deliveries are made six days a week to its distribution centre in the Midlands. Mushrooms are also supplied to local retailers such as Roys of Wroxham which has a policy to sell local produce.

Buying Group's Gas Oil Supply Helps Hard-Pushed Waveney Mushroom Grower

David Mann's operation is a turnkey one. It is big enough to makes its own compost and has its own packaging plant. Making compost is a considerable and skilful exercise — one wrong step and the whole lot has to be thrown out. But making compost is recycling at its best. Old bedding from horse stables, dry chicken manure and a few other ingredients are the starting point for compost. Once it is ready it is put into wooden trays, which are made on site, and the spawning process is introduced. Eight weeks later the mushrooms are picked and the clicked compost goes to a neighbouring farmer. "The land rour. here is heavy clay and the local farmer has been using our compost for years — his soil is now the envy of many farmers in this area," says David Mann.

Over the years, David has complied with all the regulations. Many of them, such as technical orders, ethnic orders and British retail accreditation, have been imposed by the supermarkets. With or without all the regulations, quality is a priority and he has known the supermarkets to revert their orders to Waveney Mushrooms to regain quality produce in store. "So often these days you see poor quality mushrooms in supermarkets and it's hardly surprising that shoppers opt for something else," says David Mann.

But it is not all gloom and doom. There are many aspects about his business which make him happy. He has grown up with mushroom farming and yet there is always something to learn about and he takes pride in what he produces.

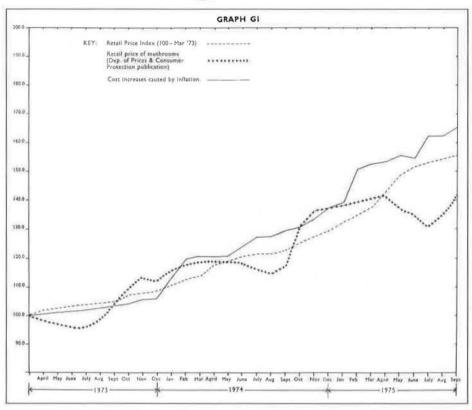
His other passion is for motor sports where his determination to succeed is also evident. After 20 years of competing he has just secured the ultimate achievement of becoming Britain's national rally champion.

Another positive element is being a member of Anglia Farmers. In addition to gas oil he uses the group for buying Calor Gas, building materials, ironmongery and other sundry items.

"The other week I urgently needed a Jaguar speed control for an electric motor," says David Mann. "Life was made easy because of my membership with Anglia Farmers. I knew I could go to specialist supplier Parker Hydraulics in Norwich and get it straight away because Anglia Farmers have an account there. There would be no reason for me to have my own account there and considering the item costs more than £1,000, Parker Hydraulics would have wanted payment up front. With Anglia Farmers it goes on their account and I get a discount. It makes life so much easier.

For more information about Anglia Farmers visit www.angliafarmers.co.uk.

## Looking back .....



Not an arresting image I know but I couldn't resist the message which is in many ways an encouraging one. If you think about it.

Will inflation destroy the UK Mushroom Industry?' was the title of this article produced by the MGA Manpower and Economics Committee and published in the December 1975 Mushroom Journal. Yes, very nearly 30 years ago. Let me quote you a line or two. "The mushroom industry throughout the United Kingdom is in the throes of a recession from which it will find it hard to make a recovery". And again, "Once a rapidly expanding industry with a remarkable record of productive achievement resulting largely from its own resourceful technical innovation it now finds itself faced with the possible destruction of its enterprise". Lastly, to give the flavour "It is estimated that 18% of the total production capacity has been shut down". I do not know about you but I find these sentiments, expressed all that time ago, strangely comforting.

One big difference from now can be seen in another snippet which advertises a scheme, designed by someone called Richard Gaze, designed to allow farms to compare physical and economic data with their peers. It was taken up more or less across the board. Quite unimaginable that businesses would engage in such an activity today. There were many revelations concerning cost and productivity aberrations.

There was also a report entitled "What do we require from our Association?" The result of a brain storming session at the then recent Stratford Conference. One of the conclusions was that less expensive venues should be found. Another that there was room for more liaison with the NFU. A lot of nice things were said about the Journal. Nothing much seems to change, does it?

About the only thing, apart from the lack of photographs, that dates this edition is that some of the advertisements wouldn't pass the modern PC censors. In those days girls with long legs could advertise mushrooms trays with impunity.

## Fourth All-Ireland Mushroom Conference and Trade Show

### Hillgrove Hotel, Monaghan 16th October 2003

The All-Ireland conferences are held every two years at the Hillgrove Hotel, perched above Monaghan Town, close to the border with Northern Ireland. There was some slight anxiety this year that attendance would be down but on the day these fears proved unfounded. The conference is free and registration, therefore, somewhat in-exact but estimates of attendance varied between 250 and 350. As the photograph shows the large lecture room was more than adequately filled.



The trade show opened at 10.30 am going right through the day until 7.30 in the evening. Technical and marketing papers were presented from 1.50 pm till 4.30. This part of the conference was opened by Gordon Orr of MIANI and closed by Minister Noel Treacy TD, it is truly an all-Ireland event, as can be seen by the make-up of the organising committee.



Noel Treacy

### **List of Organising Committee**

Mr Brendan Burns, Sylvan Spawn, c/o Sylvan Ireland, Beechmount, Navan, Co. Meath

Ms Louise Campbell, CMP, 29 Market Square, Monaghan, Co. Monaghan

Mr Eddie Daly, Chairman Ulster Farmers' Union, Mushroom Committee, 11 Crubinagh Road, Dungannon, Co. Tyrone

Mr Cathal Ellis, College of Agriculture, Food and Rural Enterprise, Greenmount Campus, Antrim, Co. Antrim

Mr Jim Gollogley, CMP, 29 Market Square, Monagha Co. Monaghan

Dr Jim Grant, Teagasc, Kinsealy Research Centre, Malahide Road, Dublin

Mr Tom Kellegher, Teagasc/CMP Mushroom Advisor, Teagasc Offices, Monaghan, Co. Monaghan

Mrs Mairead Kilpatrick, Department of Agriculture and Rural Development for N Ireland, Applied Plant Science Division, NIHPBS, Loughgall, Co. Armagh

Mr Kieran Lavelle, College of Agriculture, Food and Rural Enterprise, Greenmount Campus, Antrim, Co. Antrim

Mr Kieran Leddy, Executive Secretary, Horticulture Section, Irish Farmers Association, Irish Farm Centre, Bluebell, Dublin 12

Dr Alex McGarel, Secretary Ulster Farmers' Union Mushroom Committee, 475 Antrim Road, Belfast 15

Mr John Murray, Department of Agriculture and Ru. Development for N Ireland, Applied Plant Science Division, NIHPBS, Loughgall, Co. Armagh

Mr Gordon Orr, MIANI, 9 Earlsfort, Moira, Craigavon, BT67 0LY

Mr Mel O'Rourke, Sylvan Spawn, c/o Sylvan Ireland, Beechmount, Navan, Co. Meath

Mr Michael Slattery, Chairman Irish Mushrooms Growers Association, c/o Irish Farmers Association, Irish Farm Centre, Bluebell, Dublin 12

Dr Liam Staunton, Teagasc, Kinsealy Research Centre, Malahide Road, Dublin

### The theme of the conference was 'The Challenge Ahead'

Stephen Jess presented some interesting results of experiments carried out with *Hypoaspis* mites and the more familiar nematodes *Steinernema feltiae* (Nemasys M), for the control of both phorids and sciarids. A rather

### 4TH ALL-IRELAND MUSHROOM CONFERENCE & TRADE SHOW — (cont'd...)

abortive attempt to use *Hypoaspis* mites at HRI some years ago had rather damaged some people's expectation of these mites but Jess and Bingham's results show that they should not be so easily dismissed. Their work was soundly based on the premise that control of these pests must occur at an early stage in the cropping cycle, a stage for which at present we have little or no control either biological or chemical. It also showed particular promise with *Hypoaspis aculeifer* and positive control of phorids by *Steinernema feltiae*. There was so much information presented and in a 'scientific paper' format that one must hope that the research workers will present it elsewhere in a more practical and simplified format.

Jim Grant of Kinsealy's paper dealt with airflow for shelving. As the Irish industry evolves away from the system using one layer of bags on the floor to racks and shelves in two or three tiered rows 3 or 4 high, adequate air flow has become more complex and difficult to achieve. The paper explores, with Jim Grant's expected thoroughness, the effects of duct, or even ducts, degns, together with deflectors, on the distribution and flow of air in the these different and new circumstances. The information presented appears to be almost immediately exploitable by any grower changing systems or experiencing difficulties with air flow having already done so.

The Teagasc team of Liam Staunton, Ted Cornican, Tom Kellegher, Peter Leonard and Gerry Walshe have recently undertaken a study of casing and its management by Irish growers. Liam presented their findings which were potentially important and useful. The waterholding capacity of the casing used by the twelve growers surveyed varied from 81.5% to 86.5%. There was a big variation in the actual water content of the casings as supplied, from 62.9% to 85.5%. There were also big differences in the amount of water applied by individual growers, ranging from 3.6 l/m² to 34.7 l/m². It was found that in many cases the amount of water applied was greater than the capacity of the casing to absorb it. The information provided much for growers and casing appliers to think about and to act upon and more work is

planned by Teagasc to define desirable standards within the variables discovered.

Peter Leonard presented the next paper on the challenge presented by spent mushroom compost. He began with a surprising piece of information which was that the phosphorous content of SMC has dropped in the last 4 years by more than a third, probably due to dietary changes in commercial poultry. His presentation covered the nutrient benefits of SMC and the legislation involved in its use, including the Nitrates Directive. His main conclusion was that the management of SMC remains, at 300,000 tonnes per annum, a major challenge and although it would seems that potato and field vegetable crops are the best target for recycling, other routes still need to be found.

The Irish Mushroom industry in 2003 was the title of a paper given by Michael Neary of Bord Glass. As the Irish and British industries are so intimately linked we have included his presentation verbatim acknowledging, with thanks, his permission to so do. We have also included the splendid 'county' table of growers in the Republic.

Michael Slattery, the IMGA Chairman, concluded the formal paper session with a talk about Producer Organisations and the benefits of their amalgamating to form large POs. An interesting paper for both those familiar and unfamiliar with POs. There are 13 operating in the Republic and 3 in Northern Ireland with membership varying from 5 to 180. He outlined the benefits of size and gave two case studies. One was the largest producer organisation in Ireland, CMP (Commercial Mushroom Producers), based in Monaghan with 180 members and an annual turnover of €70 M.

The final session was an industry forum in which a selection of interests were represented by a panel, chaired by Jim Gollogley of CMP, to take questions from growers on where the future for industry north and south now lies.

After tea 3 workshops were held, one on production costs and profitability and two on employment law where for once the two parts of Ireland's mushroom industry



The full market panel

### 4TH ALL-IRELAND MUSHROOM CONFERENCE & TRADE SHOW — (cont'd...)

have to separate as they operate under different legislations.

To fill in any spare moments, during the day, between the trade exhibition and the formal sessions, there were numerous posters for participants to read.

For reference these are listed:

### **Compost quality**

Variability of raw materials can play a vital role in mush-room compost production. (G Lyons, S Moore, L Cheung and S Sharma)

Is Phase I compost produced by the in-vessel (bunker) system a uniform substrate? (G Lyons, S O'Neill, S Moore, L Cheung and S Sharma)

Use of NIR spectroscopy to predict compost quality parameters (S Sharma, G Lyons, M Kilpatrick, S Moore, L Cheung, J Murray and S Sturgeon)

Efficiency of bioconversion for Phase I, II and III synthetic mushrooms compost (M Kilpatrick, J Murray, K Finegan and S Sturgeon)

Comparative analysis and mushroom productivity trials with bunker and traditional windrow Phase II compost (M Kilpatrick, J Murray, K Finegan, S Sturgeon, J Archer and G Lyons)

### Mushroom casing

Changing requirements for lime types in mushroom casing (M Kilpatrick, J Murray and K Finegan)

The effect of lime type in casing on mushroom quality and yield (M Connolly, L Staunton, T Cormican and J Grant)

Heat treatment — a viable option for casing or its component parts? (M Kilpatrick, J Murray, G Lyons and K Finegan)

The development of improved formulations for mushroom casing and the use of rapid techniques to characterise them (J Barry, L Staunton, J Grant, M Hennerty, M Kilpatrick, S Sharma and G Lyons)

#### **Environmental control**

The use of cooling in the Irish mushroom industry (J Grant)

A model for airflow in shelving systems (J Grant)

#### Pest and disease control

Biological control of sciarid and phorid pests of mushroom with predatory mites from the genus Hypoaspis and the entomopathogenic nematode Steinernema feltiae (S Jess and J F W Bingham)

The Use of electroantennography to determine the potential of essential oils to control insect pests of

mushrooms (Agaricus bisporus) (S Jess, J F W Bingham and M Harriott)

Can phorids be controlled by entomophathogenic nematodes in mushroom production? (L Corrigan, C Griffin, L Staunton, R Dunne and M Downes)

Sciarid control: How do predatory mites compare to Dimilin? (H Schweizer, S Jess, J Murray and M Kilpatrick)

Virus X the causal agent of browning syndrome in Agaricus bisporus crops in Ireland (O Doyle)

Preliminary investigations for the prevalence of mushroom viruses including Virus X in Northern Ireland (J R Rao, D Nelson and N Lafferty, M Kilpatrick, S Sturgeon, J Murray, R Hunter and C Fleming)

#### Miscellaneous

What is organic mushroom production all about (A Saunders and C Ellis)

Mushroom Challenge (M Scott and C Ellis)

As I hope you can see from this brief and inadequate report, the All-Ireland Mushroom Conference provides a very good day out for anyone in the industry. It's not surprising that the turnout is so high. The organising committee and all the speakers must be congratulated for their efforts and achievement.

## New Silk Tie from the Mushroom Bureau

Make sure you are wearing the new mushroom tie at every mushroom meeting. Give a mushroom tie to your customers.

The Bureau's new silk tie — made in England, and with the Mushroom Bureau's website details on the reverse — costs just £15 plus £1 postage and packing (UK). Cheques should be made out to: Mushroom Bureau.

Contact Joan on 01245 400582



Label on reverse of tie

## The Mushroom Journal Profiles:

## Simon Middlebrook Tunnel Tech Limited



Simon talking with MGA Conference delegates in 2000 during the visit to Tunnel Tech Ltd.

### orkshire born and bred

Yorkshire born and a third generation mushroom grower, Simon has never moved away from his home county. Stanley, Simon's grandfather was MGA Chairman in 1947-48 and was a great contributor to the Mushroom Journal, in those days the MGA Bulletin, and Paul, his father, was Chairman in 1975-76.

By the time that Simon was growing up the mushroom farm had become rather industrialised and dangerous for young children, so it was not until he was 13 that he spent much time on it. Then, at weekends and in school holidays he was there, "driving things and doing some useful work for pocket money". An early memory is of washing out empty sheds and watering manure and straw during pre-wet. He also recalls doing some picking — not a great success, he confesses.

### An agricultural grounding

"school, Sedbergh in North Yorkshire, he was an average Lident. Rugby was the school game, but Simon concentrated on cross-country running. His ultimate aim at school was to work with mushrooms and compost, so he didn't want to go to college. However, parental authority decreed otherwise and he was sent to Myerscough Agricultural College in Lancashire. This college specialised in dairying so the microbiological bias and emphasis on hygiene was thought to be a very appropriate grounding for a future in mushroom production. Simon spent two years at college followed by a further year working on his grandparents' farm just north of York, so he was back in Yorkshire. The farm concentrated on pigs, potatoes and sugar beet.

### **Composting wisdom**

Eventually, in 1984, he found himself back home and working on the farm at Gateforth and beginning to fulfil his schoolboy ambitions of working with mushroom compost. Simon recalls that his 'A' level project at school was carried out at the family's research unit at Thorpe Farm comparing casing mixes and studying the effect of compost-fill weight on the subsequent yield of mushrooms. In those days, the mid-1970s, they were using a wagon container as a phase

II tunnel, so Simon's experience of "peak heating" is based on tunnels. Phase II in trays remains a mystery to him.

Along with his father, Paul, with whom he has spent many hours talking compost, Simon regards George Carapiet from the USA as his chief compost mentor during his early days of composting. George emphasised that the compost was the key to future results and he laid great stress on the importance of mixing and consistency. Their compost manager, Keith Morrell, was also a great help.

It was not long before Simon had the opportunity to spend a week at the CNC compost yard, then more or less a 'closed shop' to most growers. There he learnt about phase III, mainly from Wim Aerts and somebody he knew only as 'Mr Fredericks'. Words of advice he remembers to this day were 'never change too much too quickly'.

### Phase III and a day to remember

Phase III began on the Gateforth Farm on August 20th, 1986. Simon remembers this day so precisely because it was the day that the Middlebrook farms were sold to Bookers. They signed their life away at the solicitors in the morning and then began the first phase III spawn-run. "I've always worked for other people", declares Simon.

With some ups and downs, Simon remained working with composts until around 1990 when he spent several years growing mushroom and dealing with the other end of the business. Then, in 2000, came the move to Tunnel Tech (North) Ltd. Still in Yorkshire and continuing to work with compost, he became the General Managing Director.

### Not a great traveller

Simon and Katherine were married in 1988. Katherine, who is a dairy farmer's daughter, works as a Field Officer for the Duke of Edinburgh Award Scheme. They met as Young Farmers Club members and Simon recalls that he chose Katherine with great care. Her parents worked long hours on their farm looking after the dairy herd and took few holidays. This ensured that he, Simon, was not too much of a culture shock to her.

They have lived in Brayton, Yorkshire, since 1996 and have

### MUSHROOM JOURNAL PROFILE - (continued...)

a large garden. This involves a lot of grass cutting, which is Simon's job, while Katherine is very good at growing vegetables. For instance, in autumn they have a lot of pumpkins to sell for Halloween at the local Women's Institute Market.

Their two children are now at school. Charlotte, aged 12, who has literary ambitions, enjoys school whilst Charles, now 6, is also at school though he would prefer not to be. He wants to be a farmer and very much enjoys himself on Katherine's parents' dairy farm.

On the subject of hobbies, Simon declares his to be 'cutting grass and composting'. For holidays they make a point, each year, of attending the Yorkshire Agricultural Show at Harrogate. An especial rendezvous for them at the show is the Young Farmers' Club stand where they meet many friends. For the children, it is their main holiday and the whole family has a jolly good time. Another favourite break is a trip to Whitby on the Yorkshire East coast.

Simon confesses that he is not a great traveller, but in the course of his work on mushrooms and compost he has, of course, paid several visits to Dutch Mushroom Days. Other trips include Penn State University for a course on Bulk Composting Technology and to Bologna in Italy in pursuit of a Phase I meeting.

For all your bunker, tunnel, farm design or machinery requirements there's only **ONE** name...





COMPOST and MUSHROOM MACHINERY
WASTE MANAGEMENT SERVICES

Visit: www.traymaster.co.uk/mga

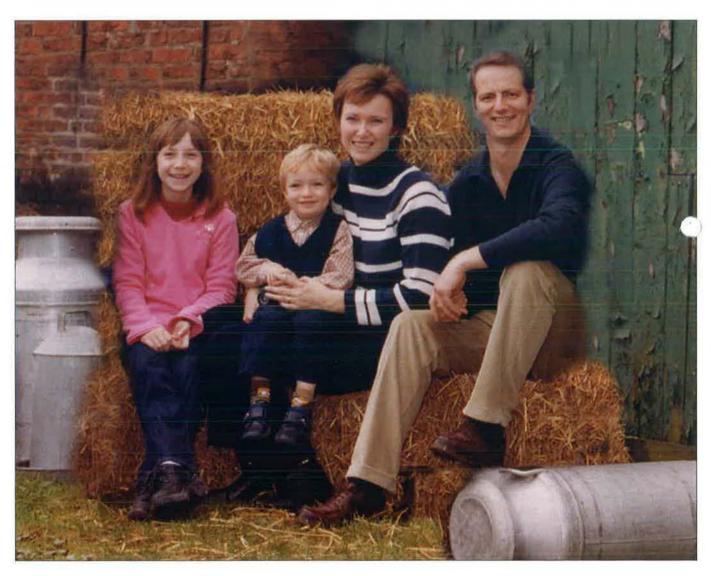
Email: sales@traymaster.co.uk Fax: +44 (0) 1692 582211 Call: +44 (0) 1692 582100

Catfield, Gt. Yarmouth, Norfolk, NR29 5BQ, England.

### A good future

Looking to the future, Simon says that Tunnel Tech will continue to expand and to improve. A core aim is to produce 'a good compost for a good result' and he is certain that this aim is even more important now than ever before.

He believes that there is a good future for the mushroom industry. "If we, at Tunnel Tech, perform well at producing compost, then the businesses we supply should do well also", he declares.



### Müshroom

## MARKETPLACE

### **HUMIDIFIERS**

### Ultra fine Sonicom

ultrasonic humidifying nozzles. Mains pressure, non-drip, no pump.

JD Ultrasonics Limited

Tel: 01924 378448 Fax: 01924 200124

### **MACHINERY AND EQUIPMENT**

TRAY & CRATE CONTINUOUS CONVEYORISED WASH-ING MACHINES — for details call The Food Machinery Company Ltd on 01634 272345

### WANTED

Carrier 50QQ 035, 3 phase heat-pumps. Fancom 765 or similar ...

Call: 01473 311245

### **CLASSIFIED ADVERTS**

Cost as little as 75p per word + VAT. Call: 01780 722074

### INSULATION

SPRAY FOAM insulation: for quality & value call Paul Homer Tel/Fax 0800 1955641 www.insulationsprayfoam.co.uk

### WANTED — MUSHROOM TRAYS

WANTED BLUE DUTCH MUSHROOM TRAYS. Artic loads collected. We also purchase fruit and vegetable containers, wooden/plastic. For further details, please contact Tel 01902 715766

### WANTED

We are looking to purchase used plastic mushroom trays, full artic loads. Also fruit/veg boxed/trays – plastic/wood.

Tel: 01902 715766

### **FOR SALE**

### HARDWARE FOR PICKMASTER 3 SYSTEM

Have available: 5 access points and a hub, 4 mobile industrial workstations, 4 touchscreens (2 new style), 4 weightronics scales. No reasonable offer refused!

Attention: Burton Loveday

Email loveday@mts.net Phone in Canada 204-233-4378 Fax 204-237-1303

### **National Korona Mushroom Union**

### **Quality Champignons Ltd.**





HUNGARY - 3396 Kerecsend, Albertmajor P.O. box 8 - Phone: (+36-36) 550-500; Telefax: (+36-36) 550-100; E-mail: hmga@mail.inext.hu

## AMYCEL'S PRODUCTS PERFORM!

Amycel continues to develop new strains and improve existing ones.

Our two newest strains, Amycel Maxx and Amycel Bella, have repeatedly performed with improved quality, productivity and consistency.

Amycel 14

- excellent sizing and quality on all three beaks
- requires growing conditions similar to those used for Delta and 2200
- fully compatible with all commercially available white strains



- faster, more productive than other available brown strains
- · exhibits an enhanced performance in all phases
- compatible with 2400 (only it's a bit faster and more vigorous)

Amycel offers a full line of spawns, compost activators, supplements and pest control to meet your growing demands. Contact your local Amycel Representative for more information or to arrange a trial.

#### Spawns

2100 • 2200 • 2400 • Delta • Alpha • 3000 • 3014 • 3015 ProFusion for the Whites & Browns

**Compost Activators** 

Sporavite • Shirley M

Supplements

ProMycel 480 • Springboard

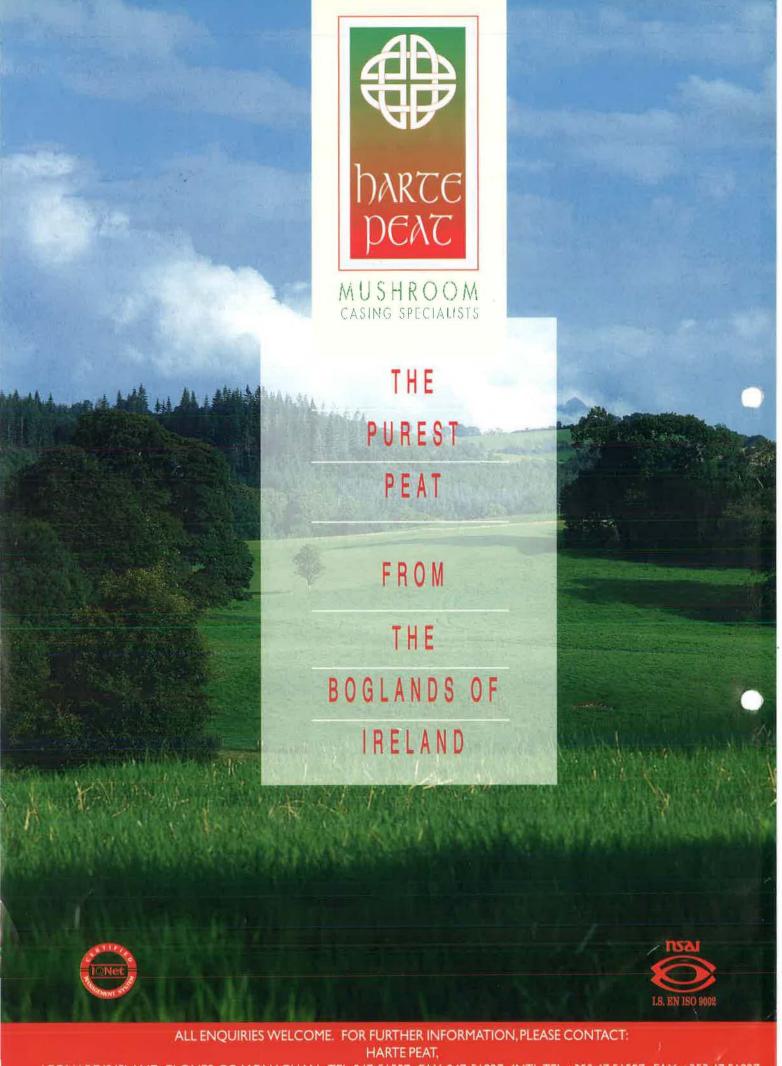
**Pest Control** 

Ficam



TAKING YOU TO THE NEXT GENERATION OF SPAWN

Amycel U.K. Ltd. Tel: (44) 01283 510305 • Fax: (44) 01283 510718



LEONARD'S ISLAND, CLONES, CO MONAGHAN. TEL:047-51557 FAX:047-51827 INTL.TEL +353 47 51557 FAX:+353 47 51827 E-mail:info@hartepeat.com Website: www.hartepeat.com